



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D4146-1
Job Sheet 169890



Part No: D4146-1

Job Qty: 10 ea

Part Name: Fitting



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 1/3/18

Job Tracking No:

Due Date: 1/12/18

Created By: Mario Poulin

Type: Stock

Description:

Note: DWG REV A IPP REV:A NEW ISSUE 10-10-05 JLM VERIFIED BY:DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	10 Ea		1/11/18	0.00	0.00	Start Up Machining-2		<i>M.P. 18/01/18</i>
100	Doosan	10 pcs		1/12/18	0.27	4.00	Doosan		<i>M.P. 18/01/18</i>
120	QC	10 pcs		1/12/18	0.00	0.00	QC8		<i>M.P. 18/01/18</i>
130	Packaging	10 pcs		1/12/18	0.00	0.00	Packaging3-2	<i>STOP</i>	<i>sg JAN 17 2018</i>
140	QC21-SA	10 Ea		1/12/18	0.00	0.00	QC21		

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	M303R1.000	2	18	0	0

Part Specifications

Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Fitting	0.290Inches + 0.006 - 0.001	<i>0.291</i> 0.296 0.289	Diameter	
2	Fitting	0.810Inches ± 0.010	<i>0.808</i> 0.820 0.800		
3	Fitting	0.550Inches ± 0.010	<i>0.552</i> 0.560 0.540	Diameter	
4	Fitting	0.470Inches ± 0.010	<i>0.469</i> 0.480 0.460	Diameter	
5	Fitting	0.330Inches ± 0.010	<i>0.340</i> 0.340 0.320	Diameter	
6	Fitting	0.063Inches ± 0.010	<i>0.063</i> 0.073 0.053		
7	Fitting	1.790Inches ± 0.030	<i>1.790</i> 1.820 1.760		
8	Fitting	1.700Inches ± 0.030	<i>1.700</i> 1.730 1.670		
9	Fitting	1.590Inches ± 0.030	<i>1.590</i> 1.620 1.560		
10	Fitting	1.190Inches ± 0.030	<i>1.190</i> 1.220 1.160		
11	Fitting	0.840Inches ± 0.030	<i>0.840</i> 0.870 0.810		

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

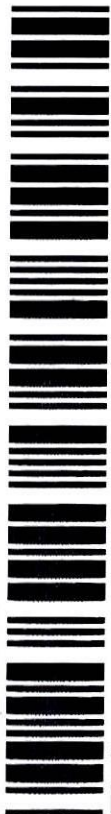
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

12	Fitting	0.810Inches ± 0.030	0.810	0.840 0.780	
13	Fitting	0.500Inches ± 0.030	0.498	0.530 0.470	
14	Fitting	0.539Inches ± 0.010	0.530	0.549 0.529	Diameter

Plex 1/3/18 8:39 AM dart.poulin.mario



Fitting

PART NO: D4146-1
Original Serial #: S032541
Revision:
Operation: Start up Operation 01/16/18
Change No: Job No: 169890

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION		AGAINST DEPARTMENT/PROCESS																																			
	Rework ☐	Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																																	
	Scrap ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																																	
	Use-as-is ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																																	
	Suspected Unapproved ☐	Large Fab ☐	Composite ☐	Supplier ☐																																		
Step #:			QTY Effective :			MRB (QSI042) Approval																																
			Disposition			Completed By																																
						Lead hand / Supervisor Approval Verification																																
						QC / QA Coordinator Approval																																
FAULT CATEGORY <table border="0"> <tr> <td>☐ Temperature/Cure</td> <td>☐ Power Loss/Surge</td> <td>☐ Positioned Wrong</td> </tr> <tr> <td>☐ Set-up</td> <td>☐ Folio/Program</td> <td>☐ Outside Dimensions</td> </tr> <tr> <td>☐ BOM/Route</td> <td>☐ Grain</td> <td>☐ Over/Under tolerance</td> </tr> <tr> <td>☐ Broken/Damage/Defect</td> <td>☐ Weld</td> <td>☐ Part Incorrect</td> </tr> <tr> <td>☐ Inspection Incomplete/Unqualified</td> <td>☐ Wrong Stock Pulled</td> <td>☐ Part Lost/Missing</td> </tr> <tr> <td>☐ Contamination</td> <td>☐ Out of Sequence</td> <td>☐ Part Moved</td> </tr> <tr> <td>☐ Countersink</td> <td>☐ Off-set</td> <td>☐ Drawing</td> </tr> <tr> <td>☐ Cut Too Short</td> <td>☐ Mislabeled</td> <td>☐ Finish</td> </tr> <tr> <td>☐ Instructions Incomplete/Unclear</td> <td>☐ Fit/Function</td> <td>☐ Misread</td> </tr> <tr> <td>☐ Drill Holes</td> <td>☐ Misaligned/off center</td> <td>☐ Turning Sequence</td> </tr> </table>									☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing	☐ Contamination	☐ Out of Sequence	☐ Part Moved	☐ Countersink	☐ Off-set	☐ Drawing	☐ Cut Too Short	☐ Mislabeled	☐ Finish	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence
☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong																																				
☐ Set-up	☐ Folio/Program	☐ Outside Dimensions																																				
☐ BOM/Route	☐ Grain	☐ Over/Under tolerance																																				
☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect																																				
☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing																																				
☐ Contamination	☐ Out of Sequence	☐ Part Moved																																				
☐ Countersink	☐ Off-set	☐ Drawing																																				
☐ Cut Too Short	☐ Mislabeled	☐ Finish																																				
☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread																																				
☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence																																				



Dart Hawkesbury
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada
Tel (613) 632-5200

Inventory

Operation Number	Operation	Serial Number	Job	Quantity	Weight	Original Serial Number	Location	Container	Status	Added	Special Comments	Label	Supplier	Change No
Part Number: D4146-1 Revision: Fitting														
140	QC21-SA	S032541	169890	10 Ea	0	S032541	ST079		Stock	1/16/2018	Issue Container			
Operation Totals:		1		10	0									
Part Totals:		1		10	0									
Part Number: M303R1.000 Revision: 303 Round Bar 1.00														
100	Receive Ft	S032514	169890	1 ft	0		MAT028		Stock	1/16/2018	Issue Container			
		S032516	169890	1 ft	0		MAT028		Stock	1/16/2018	Issue Container			
Operation Totals:		2		2	0									
Part Totals:		2		2	0									
Totals:		3		12	0									

Plex 1/18/2018 9:15 AM dart.Gagnon.Michelle